University of Alberta

The Everyday Work of Implementing Health Policy: A study of the Alberta Diabetes Strategy

by

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INTRODUCTION

In recent years, health care funders and researchers have devoted considerable attention to questions of knowledge transfer – in particular, moving the knowledge developed in research into health care policy. In order for such policy to be effective, however, it has to be well implemented. This study uses the example of the Alberta Diabetes Strategy to examine the question of what managers charged with implementing policy have to *do*, on a daily basis, in order to successfully move a policy from a document into programs that touch people's lives.

The Alberta Diabetes Strategy was announced by Health and Wellness Minister Gary Mar on May 14, 2003. It is a ten-year provincial policy initiative aimed at preventing Type 2 diabetes in the general population, as well as preventing health complications among those who have already developed this disease. The strategy's framers drew on recent research evidence about Type 2 diabetes that has shown that this disease is largely preventable, if certain risk factors such as excess weight and high cholesterol are modified. In other words, an individual's behaviour (losing weight, reducing blood pressure) can make a difference in her health. This research evidence has important implications for health policy, suggesting that government support of education programs that instruct people about the risk factors for diabetes, and encourages behaviour change, can have an impact on public health.

The "public face" of the strategy – in other words, how members of the public will encounter or be touched by the strategy – is made up of experiences such as the following:

- A low-income woman with diabetes is purchasing diabetes supplies at her drugstore. Because she has been approved for financial coverage through the Alberta Monitoring for Health program, a component of the Alberta Diabetes Strategy, she does not have to pay for the supplies upfront. Instead, she gives the cashier a plastic card that is swiped through a reader, instantly debiting the cost of today's purchase from the money she has been allocated. The screen shows how much money is left.
- A man in Medicine Hat participates in a weekly walking group organized by the local branch of the Canadian Diabetes Association. This man has also signed up to receive a health promotion kit, consisting of a pedometer, T-shirt and water bottle, as well as a logbook for recording his physical activity. These items, as well as the walking group itself, are free of charge to him, all costs covered by the Alberta Diabetes Strategy.
- A forty-year-old woman watching Oprah on a Friday afternoon notices a television commercial about how to prevent diabetes. A telephone number and website address for a Diabetes Prevention Campaign, funded by the Alberta Diabetes Strategy, are included in the ad. She notes down the telephone number, thinking she might call for more information.

- People on the Metis settlement of Paddle Prairie in northern Alberta look forward to twice-yearly visits from the Mobile Diabetes Screening Initiative (MDSI). The MDSI team of health professionals arrives in two vans that are packed to the roof with machines and supplies for testing blood and doing eye examinations. The program, funded by the Alberta Diabetes Strategy, is screening for diabetes and its complications among residents of underserved rural regions of Alberta.

Experiences like this are the public face of the Alberta Diabetes Strategy. In this thesis, however, I am presenting an analysis of the behind-the-scenes work that made such experiences happen. This work was largely carried out by managers in Alberta Health and Wellness, the Canadian Diabetes Association and the University of Alberta. Accordingly, I interviewed these managers in depth about the work they have done, the challenges they have faced, and the results they expect to come out of their work. What I found is that these managers operate in a dense and complex environment. I discovered that they work extremely hard, and, as a group, display an impressive degree of commitment and enthusiasm. These people were very motivated to work on the strategy and surmount the challenges that were part of the implementation process.

What I also found is that they are tremendously knowledgeable about how to get this work done. In particular, my analyses show that, in carrying out

their work, the managers used three forms of contextual knowledge to guide their actions: *knowing the people* who had to be involved, *knowing the space* into which programs had to be established, and *knowing the community* in which the implementation was occurring. These forms of contextual knowledge undergird four practices which emerged across all the organizations involved in the implementation: *finding the right people, navigating space for the programs, engaging the wider community,* and *operating within differing temporal structures.* This knowledgeability, in its formal and informal dimensions, is the subject of my thesis.

In the first part of my thesis, I will "set the stage" by reviewing the nature of diabetes and the policy implications of recent research into the causes and prevention of Type 2 diabetes. In Chapters 2 and 3, I will discuss the theoretical underpinnings of my work, and explain my data collection and analysis procedures. In Chapters 4 and 5, I will present the findings arising from my analysis. I first outline the history and current structure of the Alberta Diabetes Strategy, including the organizations involved and the programs funded by the strategy. Then, I examine the forms of contextual knowledge managers draw on to guide their actions, as well as the associated practices. Chapter 6 contains my conclusions.

CHAPTER 1: DIABETES AS A SIGNIFICANT POLICY ISSUE

Around the world, Type 2 diabetes has become an important health policy issue. The incidence of new cases is increasing, and each new case brings significant financial costs for individuals and health care systems. Recently, important research evidence has suggested that health policy that is aimed at educating people about the risk factors for Type 2 diabetes can play an important role in reducing the incidence of new cases. The Alberta Diabetes Strategy was drafted partly in response to this evidence and was framed as a strategy aimed at lessening the incidence of new cases of diabetes, as well as improving health outcomes among those already diagnosed with the disease. In this chapter, I will briefly review the nature of diabetes, in order to explain the need for evidence-based diabetes policy. I will conclude by explaining the importance of implementation as a step in the policy process.

Diabetes is a serious, chronic, incurable disease. There are two main types of diabetes: Type 1 (formerly known as juvenile-onset diabetes), which affects about 5-10% of people with diabetes, and Type 2 (formerly known as adult-onset diabetes), which affects the other 90-95%. Type 1 and Type 2 diabetes are quite different in etiology. Importantly, they also differ dramatically in what we know about how to prevent them. According to current research evidence, it is not possible to prevent Type 1 diabetes. However, as will be discussed in much more detail below, we now know that it is possible to prevent many, if not all, new cases of Type 2 diabetes through lifestyle factors such as exercise and

healthy living. Some of the risk factors for Type 2 diabetes, such as being overweight, are modifiable; consequently, reducing these factors can help to prevent Type 2 diabetes – as well, of course, as contributing to one's overall health. Other risk factors are not modifiable, such as being over 40 or having a family history of Type 2 diabetes. In particular, being of aboriginal ancestry is associated with increased risk of developing Type 2 diabetes (Canadian Diabetes Association 2004).

All forms of diabetes have in common the fact that, unless treated, they cause prolonged high levels of glucose in the blood stream. As well, they require daily attention on the part of the person with diabetes, and usually also from her family members. A person living with diabetes must regularly check her blood sugar levels, carefully adhere to a healthy meal plan and get regular exercise. Often, she must also take oral medication, inject insulin, or both. All this must be done consistently if the person living with diabetes is to stay well, and also to reduce the likelihood of contracting some of the long-term complications associated with diabetes. These include kidney damage (nephropathy), nerve damage (neuropathy), retinal damage (retinopathy), cardiovascular disease and lower-limb amputation. Many of these complications can, especially if not treated early enough, contribute to premature mortality (Canadian Diabetes Association Clinical Practice Guidelines Expert Committee 2003). A recent study in Ontario has discovered that both Type 1 and Type 2 diabetes significantly

shorten expected lifespans and reduce health-related quality of life (Harrison 2004).

Diabetes is a difficult disease to live with, due to the fact that it requires long-term motivation to eat, exercise, take medication and test blood sugars (Feudtner 2003). This motivation is often difficult to maintain over time because the potential consequences of *not* doing these things (the complications referred to above) may not appear for many years. The ongoing self-discipline required to eat and exercise properly on a long-term basis is challenging in its own right, but the additional motivation that is required to commit to taking medication and testing one's blood sugar levels on a daily basis, for months and years on end, is very difficult to achieve. Additionally, the costs of living with diabetes are high: blood glucose monitoring supplies are expensive, which can be a significant obstacle for those without health insurance (Bowker et al 2004). Furthermore, many people feel that the costs of following a healthy meal plan are prohibitive (Canadian Diabetes Association Clinical Practice Guidelines Expert Committee 2003; Alberta Health and Wellness 2000).

Diabetes is an expensive disease for public health care systems as well: the high rate of complications is partly responsible for the fact that the cost of diabetes is currently estimated at about $13.2 billion annually in Canada alone (Canadian Diabetes Association 2003). A recent study analyzing 1996 statistics in one Canadian province found that, while people with diabetes made up only 3.6% of the population, they accounted for 15% of the total expenditure of

hospitalizations, physician services and prescription drugs. Moreover, 36.4% of the diabetes-related expenditures for this group were related to associated conditions such as cardiovascular disease, end-stage renal disease and ophthalmic disease (Simpson et al 2003). The financial pressure of diabetes on governments will only increase, due to the fact that new cases of diabetes are being diagnosed world-wide at a rate that has led many organizations to call it an epidemic (Canadian Diabetes Association 2003). In 2003, figures were released at the Canadian Diabetes Association's medical professional conference suggesting that more than 16.5 million Canadians are considered to be at risk of developing Type 2 diabetes, fuelling concerns that the disease could eventually bankrupt the Canadian health care system (Picard 2003). Given the serious nature of the disease, and the individual and public costs associated with it, diabetes is becoming an increasingly important topic in health care research.

In the past decade, important new scientific findings have driven home a key message about the importance of sustained behaviour change in reducing the burden of diabetes. We now know that individuals can, through their behaviour, significantly reduce their chances not only of developing the complications associated with diabetes, but also their chances of contracting the disease in the first place (Canadian Diabetes Association Clinical Practice Guidelines Expert Committee 2003; Diabetes Prevention Program Research Group 2002). Several studies have established that Type 2 diabetes is largely preventable, if people commit to exercising regularly and maintaining a healthy

weight (Picard 2003). As well, the results of the 20-year United Kingdom Prospective Diabetes Trial showed that people with Type 2 diabetes could lower their risk of complications by maintaining healthy blood glucose and blood pressure levels (United Kingdom Prospective Diabetes Study 2004).

The key policy implication from these studies is that policy that encourages vigilant action by health professionals, coupled with conscientious management by the person with diabetes, could have significant benefits for both managing public health and containing health care costs (Simpson et al 2003). In other words, transferring the knowledge developed in these research studies into policy can benefit individual and public health. However, this research evidence also has another implication, which is that evidence-based policy alone will not make the difference. The policy has to be successfully implemented, and sustainable, positive behaviour change has to occur, before the research evidence will have an impact. This is why successful implementation of health policy is important, and why I have chosen this topic as my area of study in this thesis.

CHAPTER 2: THE THEORETICAL BASIS FOR THIS STUDY

My interest in the Alberta Diabetes Strategy grew out of a convergence of my personal background, scholarly interests and opportunity. From 1995 to 1999 I worked at the Canadian Diabetes Association, which gave me a deep sense of the importance of diabetes as both a public and a personal health issue. As a student within the Department of Strategic Management and Organization at the University of Alberta School of Business, I learned the importance of studying individual action in an organizational context, and developed an interest in policy implementation. This background gave me an ideal vantage point to study the Alberta Diabetes Strategy, whose implementation began just as I was beginning my thesis year.

My study grew out of a course project on Implementing Public Policy. From my analysis of the interviews I did for this course, the following research questions emerged as guides for an expanded exploration of the implementation process:

1. What are the structural elements, and associated information flows and social relationships, of each organization involved in the implementation?
2. What are the practices that will be carried out by staff members charged with the implementation of the Alberta Diabetes Strategy?
3. How do these practices translate knowledge across the communities involved in the implementation?

As a result of this exploratory work, I focused in this thesis on question #2, the practices staff members carry out in implementing the Alberta diabetes Strategy. The following is an explanation of how my literature review helped me to answer this question.

Policy implementation studies began in the United States with the publication of Pressman and Wildavsky's *Implementation: how great expectations in Washington are dashed in Oakland: or, Why it's amazing that Federal programs work at all, this being a saga of the Economic Development Administration as told by two sympathetic observers who seek to build morals on a foundation of ruined hopes* (1973). Schofield (2001: 246) cites Barrett and Fudge's *Policy and Action* (1981) as the first work on implementation in the United Kingdom. In the thirty-odd years since this beginning, interest in implementation studies has peaked, subsided and now seems to be rising once again (Hill and Hupe 2002). Hill and Hupe's book, *Implementing Public Policy: governance in theory and practice* (2002), devotes three chapters to reviewing the history of the implementation literature, arguing that scholars in this field have moved over time from an initial "top down" focus to a more "bottom up" perspective, and are now using a variety of approaches either synthesizing or moving beyond that initial dichotomy.

A recurrent notion in implementation studies, dating right back to Pressman and Wildavsky's study, has been the idea of "policy failure". This "failure" has usually been cast in the form of a lack of congruity between policy design and policy outcome; "where the outcome differs from the original policy

intention it has been suggested that implementation has failed" (Schofield 2004: 283). However, Yanow (1990: 225) suggests that this conception of failure is rooted in a conception of implementation as "the rational bureaucratic execution of policies, reinforced by the ontological view that an objectively discoverable implementation problem as an objective, factual solution." She suggests instead that implementation is a process involving "interpretations by actors in the situation, whether by implementers of policy language, by clients of implementors' acts, or by more distant audiences" (Yanow 1993: 54). The lack of congruence between policy design and policy outcome, then, is due to these multiple interpretations (Yanow 1993: 42).

Despite the number of perspectives that have been used to consider the concept of policy failure, Schofield (2004) suggests that there is still a major gap in the implementation literature. This gap is based on the "assumption that implementing actors know what to do in order to operationalize new policies" (2004: 290). From this perspective, situations where there is a "the lack of congruence between the policy ideal and the reality" may arise "because of the lack of ... operational capacity on the part of ... public managers" who are charged with implementation (Schofield 2004: 285). Consequently, Schofield concludes, we should consider managerial competence as an essential precondition for implementation, and the way to study such competence is to focus on micro-level behavioural factors. This current study, examining the implementation of the Alberta Diabetes Strategy, picks up on Schofield's call, by

focusing on the daily work of the managers charged with operationalizing this policy.

In my work, I have followed Yanow's emphasis on the necessity of studying how those involved with the implementation process interpret and find meaning in the policy they are working on. I have drawn on conceptions developed by scholars in both organizational analysis and policy studies. One important theme emerging from these works is that it is essential to consider the context in which implementation is occurring. Yanow (1990, 1993) has outlined the value of adopting a research perspective focusing on a "policy culture" shaped in part by interpretation and meaning-making on the part of those charged with implementation. Feldman and Khademian (2001) have analyzed the impact of governance structures on managers' implementation practices. From a policy studies perspective, O'Toole, Hanf and Hupe (1997) examine strategies for managing implementation in the context of a policy network involving multiple, mutually-dependent organizations. In these works, the implementation context emerges as a highly-complex, nuanced and changeable environment which both shapes and is shaped by actions taken by those connected with the process.

I also have drawn heavily on recent work in organizational analysis that draws on practice theory. Practice theory has historical roots in the work of Marx and Wittgenstein, and phenomenonology (Nicolini, Gherardi and Yanow 2003: 7-12); more recent influences are the work of Anthony Giddens (see for

example Orlikowski 2002), Pierre Bourdieu (see Gomez, Bouty and Drucker Godard 2003) and Michel de Certeau (see Whittington 2003).

Currently, there are a number of approaches to practice theory within organizational analysis, all of which are "connected by a common historical legacy and several theoretical family resemblances" (Nicolini, Gherardi and Yanow 2003: 12). A common thread among these approaches is "an appreciation of the skill by which people make do with the resources they have in their everyday lives" (Whittington 2003: 18). Practice theorists emphasize the importance of the knowledgeability, often called "knowing" to indicate its processual nature, inherent in such skill. As Gomez, Bouty and Drucker-Godard (2003: 122) explain it, "knowing is more than a knowledge that we possess. It could rather be considered as something we do." Knowing and practice are inseparably intertwined; "it does not make sense to talk about knowledge or practice without the other" Orlikowski (2002: 250).

Nicolini, Gherardi and Yanow (2003) outline several other commonalities among practice theory scholars. The first of these is an emphasis on what people actually *do*, with attention on "understanding how and under what conditions action is actually carried out" (Nicolini, Gherardi and Yanow 2003: 21). Second is an emphasis on an individual as "a social subject, a subject that simultaneously thinks, learns, works, and innovates" (Nicolini, Gherardi and Yanow 2003: 22). Here, knowledgeability is cast in terms of a social ecology, sustained by participation in social patterns such as communities, activity systems and local

cultures. Thirdly, practices are mediated by material and symbolic artifacts, including rules, norms and mapping conventions. Fourth, practice-based approaches insist that practices, and the knowledgeability inherent in them, are inescapably situated in particular time, space and relationships. Consequently, practices are ephemeral, provisional and emergent. Finally, practice theory accommodates disorderly elements, such as incoherence, inconsistency, paradox and tension, as being both fundamental and impossible to eliminate.

The study of practices is not complete without considering the context in which they are enacted. Earlier I referred to the highly-complex, nuanced and changeable environment of policy implementation. Considering this environment showed me that the study of organizational culture is a key element of analyzing practices. Organizational culture is "the set of values, guiding beliefs, understandings and ways of thinking that is shared by members of an organization and is taught to new members as correct. It represents the unwritten, feeling part of the organization" (Daft 1995: 333). As De Long and Fahey (2000: 116) argue, culture and knowledge use in organizations are linked; "any discussion of knowledge in organizational settings without explicit reference to its cultural context is likely to be misleading". I will discuss the role of culture in more detail in Chapter 4.

In my analysis, I developed a framework in which practices are both *constituted through contextual knowledge* and *comprised of activities* (Dutton et al 2001; Orlikowski 2002). I found that, while managers at all organizations enacted

the same four practices, they sometimes did so through differing activities. This work was underlain by a nuanced knowledge of the context in which the strategy was implemented.

CHAPTER 3: RESEARCH APPROACH

This chapter outlines how I set about studying the implementation, including the organizations studied and my techniques for analyzing and collecting my data. The implementation of the Alberta Diabetes Strategy was primarily conducted by staff at Alberta Health and Wellness, the Alberta/NWT Region of the Canadian Diabetes Association and the University of Alberta. I conducted interviews with managers at these organizations over the course of ten months (October 2003-July 2004). I then analyzed the transcripts of these interviews to find the practices enacted by these managers as they went about their daily work. These practices are discussed more fully in Chapter 4.

Organizational setting.

The Alberta Diabetes Strategy involved Alberta Health and Wellness, the Canadian Diabetes Association and the University of Alberta. The characteristics of these organizations shaped the implementation process, and so a brief description of them is in order. *Alberta Health and Wellness* is the ministry of health for the Province of Alberta. It is responsible for setting, implementing and ensuring compliance with health policy. Currently, the Minister is Gary Mar, and the Deputy Minister is Roger Palmer. There are ten divisions within the ministry, two of which, the Program Services Division and the Population Health Division, are involved in the implementation of the Alberta Diabetes Strategy (Alberta Health and Wellness 2004).

The Ministry does not, as a rule, have direct responsibility for health service delivery; this responsibility rests with nine Regional Health Authorities (RHAs), which are responsible for running hospitals, continuing care facilities, community health services and public health programs (Alberta Health and Wellness 2004). This division of responsibility led to some challenges for implementation of the Alberta Diabetes Strategy. Some RHAs felt that the funding going to the Canadian Diabetes Association and the University of Alberta for the Alberta Diabetes Strategy programs should have gone to the regions instead. The fact that the ministry itself was so closely involved in health service delivery was also a departure from the customary complete delegation of authority to RHAs. Consequently, part of the process of implementing the strategy was working with people in several regions to win support for the programs.

Founded in 1953, the *Canadian Diabetes Association* (CDA) has offices in all provinces except Quebec (where it has an affiliation with the organization Diabète Québec) (Canadian Diabetes Association 2004). The Alberta/NWT Region of CDA is responsible for administering the grants for the Prevention Campaign, the Clinical Practice Guidelines tools and the Alberta Monitoring for Health Program, reporting to the National Office which is in Toronto as well as to Alberta Health and Wellness. This structural arrangement caused occasional tensions, as will be seen in the next chapter.

For most of its existence, the organization has been supported solely by donation and membership revenue, receiving no government funding. Consequently, the agreement with Alberta Health and Wellness to implement programs of the Alberta Diabetes Strategy was a major change for CDA. Another change for CDA was the strategy's focus on preventing diabetes, rather than on simply serving people who have already been diagnosed with the disease.

The *University of Alberta* was founded in 1908 and is the largest university in Alberta, with a current enrolment of approximately 34,000 students (University of Alberta 2004). The faculty in the Department of Medicine are heavily involved in research, involving several important projects studying the causes, prevention and perhaps even cure of diabetes. One project which has recently received world-wide attention is the pioneering work on islet cell transplantation (the "Edmonton Protocol") in people with Type 1 diabetes. All faculty members of the Department of Medicine who are medical practitioners also have clinical appointments with Capital Health, the Regional Health Authority covering the city of Edmonton. Such appointments confer privileges to practice at one or more Capital Health sites. Most (but not all) Department of Medicine faculty members work primarily at the University of Alberta Hospital, but many also work at additional sites (like the Royal Alexandra Hospital). Dr. Ellen Toth, a practicing endocrinologist at the University of Alberta Hospital as well as a professor and researcher, is the Principal Investigator on the Mobile

Diabetes Screening Initiative (MDSI). The program had reporting responsibilities to the University of Alberta, Capital Health Authority and Alberta Health and Wellness.

These three organizations are disparate in many ways, but they had one important characteristic in common: all shared the goal of reducing the burden of diabetes. This fact created a very important context for the implementation and for my study. Furthermore, many of the people I interviewed expressed a sense of personal commitment to helping others. One participant put it this way:

> I say, look, if you want to motivate me, tell me we're going to enhance the health of people [or] we're going to improve the efficiency of service delivery. ... It doesn't motivate me if you told me I was going to get a $1,000 cheque at the end of the year if I did all these things. I might work towards it but that's not what's going to motivate me.

In my interviews, the importance of personal relationships and community-building was regularly emphasized. Several participants expressed that part of the valuable long-term outcomes of the strategy would be an increase in personal relationships and community capacity for tackling other health issues; this was often expressed by the fact that people who were introduced through working on a particular aspect of the strategy built relationships which then led to shared future projects. I propose that this strong sense of personal motivation to help others, as well as an awareness of the importance of relationships and community, was a key factor in the fact that the implementation has proceeded in the face of some quite substantial challenges. I will cover this point in more detail in Chapter 5, when I examine the work practices of the managers involved in the implementation.

The four components of the strategy that were implemented during the period of my study are described in the following section. The source for much of what is written here is a series of interviews conducted with the managers who were active in the work of implementation; other sources are acknowledged in the citations.

Data sources and collection

I conducted my research over a period of ten months, October 2003 to July 2004. The main data source I used for my thesis was a series of semi-structured interviews (Patton 2002) with people who were connected in some way with the implementation of the Alberta Diabetes Strategy. These people were selected according to a purposeful sampling strategy, whereby I deliberately chose my interviewees based on the likelihood of gaining insight into the processes on which my research questions focussed. I chose to interview only managers, because I wanted to focus on the practices managers enacted in order to advance the implementation process.

On the whole, I chose to interview people for whom the Alberta Diabetes Strategy represented all, or a major part of, their job. I spoke to eight people at Alberta Health and Wellness, four at the University of Alberta, and five at the Canadian Diabetes Association. I also interviewed two people who had a more distanced relationship with the strategy – they were involved in the implementation but it was a smaller part of their job. These two individuals had a different perspective on the strategy, due to this distance, and talking to them

was very valuable for me. Four people were interviewed twice. The individuals I interviewed had a wide range of length and nature of involvement with the Alberta Diabetes Strategy. I started with one key person, who put me in touch with other people who were important in the implementation process. These people in turn recommended others to whom I should speak, sometimes paving the way for me with a preliminary phone call or email.

In all, I conducted 19 interviews. Of these, all except three were tape-recorded. I worked from verbatim transcriptions of the tapes; in the cases where the interviewee did not consent to tape-recording, I made notes throughout the interview, and then wrote up more detailed notes immediately following the interview. I also wrote reflective memos throughout data collection, recording ideas and potential themes that occurred to me. As well, during my data collection I made two presentations about my research (December 2003 and May 2004) that were helpful both for collecting my own thoughts and for getting feedback from others.

Interview analysis strategy

To analyze the data, I originally intended to use a temporal bracketing strategy, as outlined by Langley (1999). This is a sensemaking strategy, one of several available to researchers interested in understanding "how things evolve over time and why they evolve in this way" (Langley 1999: 692). To carry it out, the researcher must break the time scale of the research into phases, each marked by some internal continuity and some discontinuity with other phases. This

creates comparative units of analysis. I anticipated that this strategy, by helping me identify change over time, would help me analyze how what the managers did in one phase contributed to results in a subsequent phase. In other words, I would be able to assess the effectiveness of their practices by seeing what these practices accomplished. In actuality, however, I found that the compressed scale of my study did not allow me to identify sufficiently distinct temporal phases. This difficulty was compounded by the fact that most of my first round of interviews focused on the history and structure of the strategy rather than on managers' work. This was necessary information for my study, but it meant that I could not do much comparison between practices in the two phases.

Instead, therefore, I used another strategy for analysing my interview data, based on Piercy (2004). Piercy's strategies for analyzing semi-structured interview data are primarily based on Grant McCracken's (1988) book *The long interview*, but she has also incorporated ideas from other qualitative methodologists. This approach was appealing to me because McCracken's method is based on the presumption that the researcher has already used one, or several, theoretical framework(s) to shape the research questions and subsequent data analysis. In fact, McCracken suggests doing a thorough literature review before doing such things as creating an interview protocol. Since I knew at the outset of my study that I was interested in work practices and the knowledgeability they contained, and I had already spent a considerable amount of time analyzing the practice literature, this method was a good fit for me.

After identifying the theoretical framework for the research, the next step is for the researcher to examine her own "associations, incidents and assumptions" (Piercy 2004: 2) that she has about the topic being researched. In conducting this examination for myself, I saw that I was both an insider and an outsider in relation to the organizations involved in the Alberta Diabetes Strategy: Alberta Health and Wellness, the Canadian Diabetes Association (CDA) and the University of Alberta. This position had a significant impact on my interviews with people at these organizations.

For example, I had worked for four years (1995-1999) at the Canadian Diabetes Association, and consequently was very familiar with the background of the organization's lobbying efforts, as well as with the impact of diabetes on individuals and their family members. This meant that in my interviews I did not have to spend a lot of time establishing the nature of the organization. The fact that I knew so much about the clinical and personal aspects of diabetes was also very helpful. However, the fact that four years had elapsed since leaving CDA meant that I was not familiar with current events in the organization, and, since there had been significant staff turnover since my own departure, I only knew one of the people I interviewed.

As a student and employee at the University of Alberta, I was somewhat familiar with the university's institutional environment; even though I am in a different faculty than those interviewed, I did not have to spend a lot of time finding out about how the university operations. However, the situation was

very different in my interviews at Alberta Health and Wellness. Since I have no background in government operations, this meant that during my interviews with my government contacts, they had to spend a lot of time explaining to me "how things work around here".

Interview analysis process

For analyzing the interview transcripts and notes, I generally followed McCracken's five step analytic process, as explained in Piercy (2004). Although this process is described in terms of "steps", Piercy does not see it as a tidy or completely linear progression, suggesting rather that the steps may be revisited in an iterative fashion (K. Piercy, personal communication, August 28, 2004).

The first step in this process is to read the interview transcript twice: the first time, to familiarize oneself with the content, and the second time, to begin the process of analysis by making brief notations in the margins. These notations are "short phrases that try to capture what the respondent is discussing in that part of the interview" (Piercy 2004: 4); their purpose is primarily to sort out important from unimportant material in the transcripts. Since I had done all the interviewing myself, I already was familiar with the content on first reading the transcripts, but I read through each one once before making any notes. My purpose at this stage was to clarify my own recollections about what had been said, how it had been phrased and how the interview had generally "flowed". Then, on second reading, I would make one or two-word comments in the

margin, not so much with an eye towards establishing codes or themes in the data, but more as a conversation with myself about what had been said.

In the second step, the researcher takes the observations noted in the first stage, along with ideas from the literature review and theoretical framework, and begins playing with preliminary descriptive and interpretive categories. At this stage, I was primarily interested in three inter-related issues that surfaced strongly in the interviews: the presence of both formal and informal processes in managers' work environments, the importance of relationships in facilitating implementation, and the importance of individual commitment, credibility and experience. I considered how these issues would relate to managerial practices, but did not, at that point, feel ready to make any suggestions.

At this point, I went through all of the interview transcripts and began assigning codes to chunks of the data. Within each interview, I then grouped similarly-coded material together, and created a table of contents for that interview using the Table of Contents Feature in Microsoft Word. I then took the tables of contents from individual interviews and created a master table of contents for the entire data set. Consequently I could see at a glance which interviews contained references to "challenges in implementation", "relationships", "definition of policy success", and the like. Although I worked for a while with this master table of contents, eventually I became so familiar with my data that I could remember which people had talked about particular

issues, and didn't need the table anymore. I also found it less useful as my sense of how to name and identify particular themes evolved.

In the third of McCracken's stages, the researcher considers the observations developed in the first two stages and begins thinking about how these observations may be related to each other. At this stage I started pressing more clearly on the idea of "knowing-in-practice" and looking for how the three issues of individual characteristics, importance of relationships and the presence of formal and informal processes could relate back to this theoretical concept. At this stage I began using charts to group together chunks of data that seemed to express similar ideas. However, the relationship to "knowing-in-practice" was still elusive.

The fourth stage is where the researcher begins determining basic themes, by looking at clusters of data and how codes may relate to each other, as well as the researchers' memos. At this point I also returned to my literature, to see how other scholars had tangled with identifying knowing-in-practice from interview data. The main stumbling block I was encountering at this point was the question of how to build a framework that encompassed the strong sense of what at that point I was calling a "moral/ethical purpose" which was expressed by the people I was interviewing. I did not find anything in the literature on knowing-in-practice I reviewed which included this dimension. The closest I could find was in work by Gomez, Bouty and Drucker-Godard (2003) which cited "personal predisposition" as an element of knowing-in-practice among chefs. I did not feel

this concept fit completely with my data, as chefs are self-selected and operate as independent entrepreneurs, therefore operating in a very different context than the managers I was speaking to. However, at that time I retained this category in my analysis.

The charts I built at this point identified some categories that I felt had come out of my analysis so far. I identified three sets of practices: relational practices, influencing practices and program management practices. I also identified four aspects of knowing-in-practice: personal predisposition, relational knowledge, strategic knowledge and knowledge gained through learning. These two sets of categories overlapped with each other, however, and seemed clumsily constructed. I did not feel at this point as if my analysis was either convincing or complete. In other words, I was not happy with the basic themes that I had identified.

I decided to return to my literature for guidance. At this point I drew heavily on a 2002 article by Orlikowski, in which she identified five kinds of knowing among people working in a globally-distributed software development company. She suggests that each of these kinds of knowing is constituted in particular practices, which are themselves comprised of specific activities. The five kinds of knowing in her article were: knowing the organization, knowing the players in the game, knowing how to coordinate across time and space, knowing how to develop capabilities and knowing how to innovate. I decided to use these categories to fit against my data. I amended two of them, based on my

knowledge of my data: I changed "knowing the organization" to "knowing the implementation context" and changed "knowing how to innovate" to "knowing how to manage" (since innovation wasn't a primary theme in my data, and I wanted a category to capture the nitty-gritty practical work of implementation). I also added a sixth category, again based on my data: "knowing the 'ethical end' of the policy". I wanted this category in order to capture the strong moral/ethical theme that had been emerging from my data.

So my categories were:

- Knowing the implementation context
- Knowing the players in the game
- Knowing how to coordinate across time and space
- Knowing how to develop capabilities
- Knowing how to manage
- Knowing the "ethical end" of the policy

I used these categories to classify chunks taken from my interview data. Although I could find data chunks to fill in all the categories, and could identify practices that the managers I had interviewed conducted as part of each sort of knowing, the result was not convincing to me; it felt awkward and contrived. As before, I struggled with the issue of how to deal with personal characteristics, such as credibility, commitment and experience, and with the sense of moral/ethical purpose expressed by my interviewees.

At this point, I returned to my data, and re-analyzed it in a new way. Up to this point, I had been analysing all the interviews together, reading through them in chronological order according to the date the interview had taken place. I realized that this had led me to overlook the important distinctions between the organizations to which my interviewees belonged, which was in turn obscuring my ability to interpret the organizational context in which they worked. Accordingly, I grouped the interviews by organization, and re-read the entire set of transcripts, abandoning all my earlier coding.

Grouping the interviews in this way proved to be immensely valuable. The differences and similarities between the managers' work at the different organizations emerged quickly and clearly. I was soon able to move to McCracken's fifth stage, the delineation of predominant themes in the data. These themes were the practices which the managers at the three different organizations shared in common. These practices are: *getting the right people in place; negotiating space for the programs; engaging the wider community;* and *operating within differing temporal structures.*

Overview of findings

My struggle about how to deal with the issue of "personal predisposition" was resolved in this final pass through the data, when I realized that a crucial theme running through the data was the importance of having the "right people" – stakeholders, staff and people from related agencies – in place. Therefore, the first practice was *getting the right people in place.* The elements of being the right

person were the factors I had been previously classing as personal predisposition: credibility, commitment and experience, along with a willingness to work extremely hard. This practice was consistent across organizations. It was enacted in a number of ways, such as recruiting people to serve on Advisory Committees, hiring staff and tapping into stakeholders and employees of other organizations for their support.

Once this first practice had been established, the subsequent three practices quickly became clear. The next practice concerns what the "right people" do once they are in place. I found that these people drew on their relational skills for the purpose of *negotiating space for the programs* that they were implementing. By this I meant the process of making space for new programs within and between the organizations involved. Again, this practice was enacted in different ways by various organizations. The striking difference was the fact that Alberta Health and Wellness staff participated in this practice through activities that facilitated the work of the contracted agencies. The CDA and the U of A participated in this practice by working through a cluster of relationships and focusing on pragmatic details.

The first two practices – *finding the right people* and *negotiating space for the programs* – were enacted in the immediate context of the strategy: the programs themselves, and the organizations directly connected to implementing them. However, the other two practices I identified – *engaging the wider community* and *operating within differing temporal structures* – involved a broader sphere. *Engaging*

the wider community was the term I gave to working in the face of recognizing the magnitude of change required, and understanding the knock-on effects of implementation. The second of these was *operating within two temporal structures* – the short-term policy agenda rubbing uncomfortably against the long-term life sphere. A predominant issue here was the impossibility of ever knowing the full impact of the strategy.

A framework developed from my literature review supported the themes emerging from the data. In keeping with Orlikowski's suggestions that practices are made up of activities, I found that the managers at the different organizations used different activities to enact these common practices. Consequently, this analysis answered my second research question (what are the practices that managers enact?), congruent with Piercy's (2004) suggestion that this stage of analysis can provide answers to research questions. Also, I returned to an article by Dutton et al (2001), analyzing issue-selling moves carried out by middle managers. The authors found that the managers' decisions about how to operate were undergirded by process knowledge about the relational, normative and strategic contexts in which they worked. Relational knowledge is centred on the "individuals and social relationships that were important to their issues"; normative knowledge concerned managers' "understanding of the accepted or appropriate behaviour patterns in a particular organizational setting"; and strategic knowledge was related to an understanding of "the organization's goals, plans, and priorities", including a "sense of the competitive scene or

broader institutional context in which an organization is embedded". I adopted the categories of relational and normative knowledge for my framework. These two were strongly-related, as relationships were a key mediator for the accepted behaviour patterns in the settings the managers worked in. I differentiated them according to the criterion that relational knowing was primary in the first category, but secondary in the second category.

I found that the strategic knowledge category required some adaptation for my purposes. Instead of knowledge about an institutional context, I propose a sense of knowledge about the community context in which the programs are being implemented. This sense of community context includes not only a sense of the community in which the programs are unfolding, but also of the timeframe in which the impact will be felt.

Consequently, an overview of the framework I developed at the end of this process is as follows:

Knowing constituted in the practice	**Practice**
Knowing the people	Getting the right people involved
Knowing the program space	Negotiating space for programs
Knowing the community	Engaging the wider community
	Operating within differing temporal structures

As I will explain in more detail in the following section, staff members at each organization sometimes enacted these practices through different activities.

Conclusion

The analysis of 19 interviews with managers responsible for implementing the Alberta Diabetes Strategy were meshed with a framework developed from literature on knowing-in-practice. This framework helped show that the managers enact practices that are situated in a number of complex and demanding contexts. In the next two chapters, I will discuss my findings in more detail.

CHAPTER 4: THE HISTORY AND STRUCTURE OF THE ALBERTA DIABETES STRATEGY

The Alberta Diabetes Strategy (ADS) is the provincial government's response to the increasing incidence of Type 2 diabetes. As outlined earlier, diabetes is a costly and serious disease. Consequently, reducing the incidence of new cases, as well as the incidence of complications among those who already have it, will have significant public and individual health benefits. The evidence base for the ADS within the provincial ministry of health and wellness came from several sources. This included research evidence, such as that described above, and statistical evidence gathered by the Health Surveillance Branch of Alberta Health and Wellness, showing the economic and health impact of diabetes in Alberta. As well, lobbying efforts over several years from the Canadian Diabetes Association (CDA) were an important factor both in pushing for a strategy, and in influencing the eventual policy design.

The analyses of interviews and archival documents disclosed that the history of the strategy unfolded in three phases, which I call *advocacy*, *design* and *implementation*. Although my main focus was of course on the implementation phase, it is important to set the context for this by briefly outlining the first two phases as well.

Advocacy. The *advocacy* phase, a period of two or three years leading up to mid-2001, was marked by action by the Canadian Diabetes Association and by other groups and individuals pressing for greater government action about

diabetes. The CDA carried out an intensive lobbying campaign, primarily aimed at pressuring the government to put more financial help for the costs of managing diabetes. Elements of this campaign included the release of a Diabetes Report Card in 2001, grading all provincial governments according to services provided to people with diabetes; Alberta received a D+, the second-lowest grade in the country (Canadian Diabetes Association 2001). As well, the organization organized a postcard campaign, mobilizing members of the public to send over 7,000 postcards to the Minister of Health and Wellness, pressuring for increased financial assistance. Accounts differ as to the efficacy of this campaign in achieving the final result: speaking to those involved, it is apparent that those within CDA see it as having been very effective, whereas some Alberta Health and Wellness managers felt that it created some irritation within the ministry that was not helpful.

Importantly as well, advocacy also occurred within Alberta Health and Wellness itself, as managers carried out "issue-selling" activities (Dutton et al 2001) over a period of two or three years, persistently bringing statistical and research evidence about the burden of Type 2 diabetes to the attention of those higher in the hierarchy. A further important factor within the Ministry was the appointment of Gary Mar as Minister in March, 2001. Many of the people I interviewed spoke about Minister Mar's personal commitment to tackling diabetes as a key factor in pushing forward the process. In late 2001, the Alberta government convened a working group to draft a provincial diabetes strategy.

Design. The *design* phase was a period of intense effort on the part of this working group, which lasted for several months between late 2001 and the spring of 2002. Representatives from many stakeholder groups (various ministries within the federal and provincial governments, regional health authorities, the Canadian Diabetes Association and Dietitians of Canada) served on the working group. The committee finished its proposed strategy in March 2002, recommending a strategy focusing on preventing Type 2 diabetes and its associated health complications, and proposed some programs, to be planned and delivered by the Canadian Diabetes Association and the University of Alberta. From this point, the proposal wound its way through government channels for several months, until the final strategy was formally announced in May 2003. The Alberta Diabetes Strategy that emerged from the above process is a prevention strategy, aimed at preventing new cases of Type 2 diabetes in the general population, and also preventing the progression to complications among those who are already diagnosed with the disease.

Implementation. In the implementation phase of the strategy, Alberta Health and Wellness has a funding and oversight role. The programs are being designed and carried out by two agencies, the Canadian Diabetes Association and the University of Alberta. During the period that I studied (October 2003-July 2004), four main components of the Alberta Diabetes Strategy were implemented. (A fifth planned component, a public-private partnership with the pharmaceutical sector, did not reach the implementation phase during this time.)

These four components were linked by a common emphasis on encouraging behaviour change, such as healthy eating and increased physical activity, through a range of innovative programs.

In brief, these programs are:

- The Prevention Campaign – an educational campaign addressed at preventing Type 2 diabetes in the general population;
- The Alberta Monitoring for Health Program – enhancement of an existing funding mechanism assisting low-income Albertans with the cost of diabetes supplies;
- Development of educational tools for physicians and people with diabetes, based on the 2003 version of the Canadian clinical practice guidelines for treating diabetes;
- The Mobile Diabetes Screening Initiative – a mobile program carrying out screening for diabetes and its complications on Metis settlements in northern Alberta.

1. Prevention Campaign.

The Prevention Campaign was developed by the Canadian Diabetes Association (CDA) with $2 million in funding from Alberta Health and Wellness. In the text of the Alberta Diabetes Strategy, this program was described as "a grant to the CDA for work with key stakeholders to develop a provincially organized, community based education initiative, including Aboriginal populations, focused on the prevention of type 2 diabetes" (Alberta Health and

Wellness 2003b: 1). The CDA was responsible for taking this relatively imprecise statement and turning it into actual programming.

The first step in getting the Prevention Campaign underway was establishing a legal agreement between Alberta Health and Wellness and the Canadian Diabetes Association; this contract established that the funding for this program would run for three fiscal years, from April 1, 2003 to March 31, 2006. Following that, a program coordinator was hired who began work in December 2003. Four other staff were subsequently hired, three doing program delivery and one providing administrative support. Other staff members within the Canadian Diabetes Association also worked on aspects of this program, charging their time back to the program so that no CDA funds were used.

As well, an Advisory Committee was set up, consisting of representatives from CDA, Alberta Health and Wellness, Dietitians of Canada, the Alberta Centre for Active Living, the Alberta Native Friendship Centre, two regional health authorities, Health Canada, the Centre for Health Promotion Studies at the University of Alberta and Alberta Learning. This committee met in person four times a year, but the program coordinator consulted with members by email and telephone on a regular basis; there were several subcommittees that met more frequently.

The staff and committee members designed a program that had three parts. The first of these was a media campaign consisting of radio and television advertisements, encouraging people to be physically active and to eat well in

order to prevent diabetes. This campaign was aimed at women aged 25-54 because women in this age group tend to make a lot of the decisions about diet and exercise for their extended family members (buying groceries, caring for aging parents, deciding to register children in sports, etc.) thereby influencing the health of all of these people. Consequently, educating people in this demographic group has the potential to support widespread behaviour change.

The second part was the Keep Your Body in Check program, an intensive diabetes prevention program rolled out in three Alberta communities, each of which was picked for specific demographic characteristics indicating that the population has a higher-than-average risk of developing diabetes. Norwood-City Centre is an inner-city neighbourhood of Edmonton and was selected because the population generally has a low income. Bonnyville-St. Paul is a region of Alberta with a significant Metis and Aboriginal population. Medicine Hat is a city in southern Alberta with an older population. Low income, aboriginal ancestry and aging are all predisposing factors for diabetes (Ruttan 2004).

The Keep Your Body in Check program officially launched in May 2004 (Keep Your Body in Check 2004). People in each community were encouraged to register; they received a kit containing a pedometer, water bottle, T-shirt, nutritional information, a guide to activities in their community, and a logbook to record food and exercise. At the time of registration, participants were also asked to submit some information such as their body girth and body mass index,

along with some details about their eating habits; this information will be compared with the results at the end of the program as part of the evaluation.

The Prevention Campaign, in common with other components of the Alberta Diabetes Strategy, is predicated on improving public health in the long term by supporting individual behaviour change. But the managers I spoke to were well aware that the prevention messages conveyed by the program were competing with a host of other messages, such as marketing from junk-food companies, and also contending with the difficulty people face in making change. As one manager put it,

> Being more physically active and eating better food is really, really, really, really, really hard to do. You can't just say, "Oh gee, you should be more physically active." We need to start getting people to think, "Why am I such a couch potato? Why am I choosing ice cream over a grapefruit?" This is tough stuff, and we can't just do kind of a glib [message]: you should eat better and don't smoke.

The third part of the Prevention Campaign was conceived but not implemented during the period of my study, due to the fact that staff were consumed with the task of getting the first two components up and running. It is planned to be an education campaign in two parts: one part is aimed at community leaders, training them about diabetes in return for a commitment from each trained person to hold at least two subsequent training sessions to teach people in their circle of contacts about diabetes and how to prevent it. The other part is aimed at post-secondary institutions that train daycare workers, home care aides and similar positions, building a session about diabetes into the curriculum. In both cases, the hope is to build long-term community knowledge about diabetes and how to prevent it.

The CDA staff members I interviewed were all very excited about and committed to the Prevention Campaign. They were pleased to have had the opportunity to tackle a large-scale prevention initiative, a motivation reinforced by the familiarity they already had with the difficulties of living with diabetes. They were also excited by the opportunity to demonstrate both to government and the public at large that CDA was capable to successfully accomplishing a task of this magnitude.

However, it was clear that overall, the implementation had not been an easy process. The people I interviewed identified several challenges they had faced during the design and delivery of the Prevention Campaign. One person summed up the first of these, the requirement to learn a lot in a hurry, as, "There's been no learning curve. It's just been vertical." The challenge of learning all that was required to design and deliver these complex programs was heightened by the extremely compressed timeframe of the project. This had required a very high volume of work (long hours, few if any holidays) from everybody involved over a period of many months. As well, relationships with Regional Health Authorities (RHAs) proved to be a delicate area; some regions felt that the money given to CDA should have come to them instead, either to implement the ADS or for other diabetes programming. Because implementing the Keep Your Body in Check program required CDA to work closely with the RHAs in which the three communities were located, negotiating these relationships was vital to the success of the program.

Another challenge was discovered in the process of designing the program. In testing various messages with focus groups, managers discovered that people knew far less about diabetes than they had expected. As one person put it, "People don't even know what diabetes is. Period." This made the task of educating the public about prevention even more difficult. In order to understand that Type 2 diabetes is largely preventable, a person has to first understand that there are different types of diabetes, that Type 2 diabetes is the most common type and therefore the kind she is most likely to develop, and, importantly, that it is a serious disease. Only then can the person start to think about the fact that factors such as being overweight or having a family history of diabetes may predispose her to a higher risk for Type 2. When considering the long-term impact of the Prevention Campaign, the people I spoke to reflected on the program as being only the very beginning of what is needed to educate the public. They felt that it would take a long time for even the most basic messages to really get through to people, and only then would behaviour change start.

Finally, there was a challenge for CDA in making the internal organizational changes required to accommodate a new, large program. Accepting government money for educational programs was a new practice for CDA; as well, focussing on prevention of Type 2 diabetes, rather than providing services to the already-diagnosed, was also new. CDA staff had to be aware of communication issues, such as keeping staff who were not working on the Prevention Campaign informed about progress and developments. As well, they

had to make sure that people at the National Office headquarters in Toronto were sufficiently informed about the realities of implementing this unprecedented type of program in Alberta, so that they could understand and support the work that the Alberta staff were doing.

2. Clinical Practice Guidelines.

The Canadian Diabetes Association was also responsible for administering a grant for developing new educational tools, one for physicians and one for patients, based on the 2003 Clinical Practice Guidelines for the treatment of diabetes in Canada (Canadian Diabetes Association Clinical Practice Guidelines Expert Committee 2003). These tools were based on ones that had been developed by the Chinook Health Region for the 1998 Clinical Practice Guidelines. The physician material was a flowsheet indicating how often a patient with diabetes should receive various tests. The patient material was eventually designed in the form of a calendar showing the person with diabetes how often she needed to see the various members of their health care team, and what tests she should request at each visit.

The CDA staff person in charge of this project brought together two working groups, comprised of health professionals and people with diabetes, to evaluate each of the two original tools. They made suggestions for how to update the materials in light of the new Clinical Practice Guidelines. After that, the groups continued to confer by teleconference and email until both tools were ready for publication in the summer of 2004. At the same time, CDA staff with

the input of some working group members developed a dissemination plan for these materials. One aspect of this plan was the identification of key people within each of the Regional Health Authorities who have a good network of contacts and would know about, for example, upcoming workshops within the region at which the new materials could be introduced. By such means, CDA hoped that the materials would become widely known and used.

This project was short-term and relatively straightforward, at least in comparison to the other components of the Alberta Diabetes Strategy. The CDA staff members whom I spoke to about this project did not identify any major challenges that had arisen during the implementation process. It was clear from the interviews that knowing the right people, either as part of the working group or of the dissemination process, had been important. In one interview, when I asked my participant what she had needed to know while working on the project, her first response was "People!" She then amplified:

> And groups actually, the history and the groups, because the groups have their specific needs as well. So trying to get through that, and that was really easy initially. And then working through who were the best people to work on certain things has probably been the biggest [piece], getting to know who the groups are.

As in many of the other components of the strategy, relationships with regional health authorities surfaced as an issue that had to be dealt with during the implementation. However, in this case the relationships were framed in terms of securing cooperation for the dissemination plan.

3. Alberta Monitoring for Health Program.

The third component of the Alberta Diabetes Strategy was a dramatic increase in funding to an existing program, Alberta Monitoring for Health (AMFH). This is a funding mechanism, first established in 1991, to help Albertans manage the costs of their diabetes supplies. Since its inception, the Canadian Diabetes Association has administered AMFH. In 2002, AMFH received $2.6 million for the year, but in the Alberta Diabetes Strategy this was increased by $8 million a year, for a total of $10.6 million on an ongoing basis.

The eligibility criteria and funding support levels for those eligible for the program both changed under the new structure. Previously, the criteria for eligibility were that registrants had to be using insulin to treat their diabetes, and not have any private health coverage. A person accepted into the program had had to pay upfront for their supplies, and then apply for reimbursement of 65% of the cost, up to a yearly maximum of $350 (with the potential of an additional $200 if the fund had extra money at the end of the fiscal year). Under the new terms, all people with diabetes are eligible for funding, as long as their income is below a predetermined level. People using different means to treat their diabetes receive varying amounts: people using insulin can receive up to $550 year, people using oral medication can receive up to $250, and those treating their diabetes with diet alone can receive up to $50 (Ruttan 2003).

The increase in funding, the change to the eligibility criteria and the impact of provincial privacy legislation meant that CDA had to significantly

revamp its business processes connected with AMFH. A new process was established whereby a person who had been approved for funding did not any longer have to pay for supplies upfront and then receive a reimbursement cheque from AMFH; instead, she would receive a plastic card that could be "swiped" by her pharmacist for payment, until the maximum allotted funding was reached. This was a great increase in convenience for both the client and pharmacist, but created a host of complicated data privacy issues. As well, data sharing issues arose because of the necessity of verifying AMFH applicants' eligibility for Alberta Health and Wellness premium subsidy. Consequently, CDA had to go through an extensive privacy impact assessment, as dictated by the provincial Health Information Act.

This privacy impact assessment was time-consuming and required extensive effort on the part of CDA staff to make sure that effective procedures were in place to protect the patient data. They worked with a company which set up the technical "back end" of the process, as well with an external auditor who verified compliance. Meeting these requirements slowed down launching the new AMFH structure. It also had some other effects, one of which was explained by one participant as follows:

> It was hard for National Office [in Toronto] to understand why are you doing all this stuff, and why do you guys keep saying you need more resources to do this, and why were you paying this company this amount of money.

4. Mobile Diabetes Screening Initiative.

The final component is the Mobile Diabetes Screening Initiative (MDSI). This is a mobile screening program that is run by the University of Alberta's

Department of Medicine. The program is modelled on an existing Health Canada program, SLICK (Screening for Limbs, ISight, Cardiovascular and Kidney Complications of Diabetes) that screens for diabetes and its complications among aboriginals living on reserves. The MDSI was conceived as an equivalent program for aboriginals living off-reserve, whose health is a provincial responsibility. At the moment, the program is providing services to Metis people living on settlements in Regional Health Authorities #7 and #8, but this scope may be expanded in the coming years.

The MDSI team travels from Edmonton to the Metis settlements in two vans packed to the roof with medical equipment. Team members stay in the community for a total of two weeks, generally with the opportunity to return home on weekends. The staff treat people who have already been diagnosed with diabetes, screening them for complications. They also screen people who are not diagnosed with diabetes but who are at risk of developing it.

The team is comprised of people with training in nutrition and retinal photography, as well as a registered nurse, a licensed practical nurse and a dietitian. As well, in each community a local person is hired to work for a period of two weeks before the team arrives as well as during the time the team is in the community. This person works to spread the word about the MDSI, encourage people to come out and book appointments, so that when the team arrives they can move immediately to seeing patients. It was clear from my interviews that this person was an important part of the process. In communities where an

outgoing, assertive person was hired, more "buzz" about the visit was generated than when a person who was more shy and retiring was in place.

At the beginning of the implementation, the MDSI program had funding for only one year. There was consensus among the people I interviewed that the key to securing ongoing funding was to deliver results in the shape of number of communities visited. There are four settlements in each of the two RHAs, and the MDSI team's goal was to reach all eight in the first year of operation, with particular emphasis on reaching five in the first fiscal year (ending March 31, 2004). This goal was met, after a tremendous effort from the team to pull the project together. Achieving this in a very tight timeframe required long hours from everyone involved, and contributed to some staff turnover due to the intensity of the work and the challenges of frequent travel.

Figuring out how the program would function was not straightforward; there was a considerable amount of logistical work that had to be completed before the team could make its first visit. As one person explained, this work involved answering a series of questions:

> How are we going to use these vans, what in the way of equipment is going to have to go in these vans? And trying to figure out all of the things that we would need in the field – what are we going to be doing out there? What does this equipment look like? A lot of it was new stuff and so we had to learn all of that and figure out what we really did need in the way of vehicles.

> There was so much that had to take place in the way of acquisition of equipment, hiring of a team, and even identifying how the team would function. What would the team [members] be doing? How would they work in a field? Who did you need? What type of qualifications did they need? How would they work in the field?

Even when these questions had been answered, many aspects of the program had to be adapted as the team learned more about what worked best in

the field. All the people I interviewed in connection with this program emphasized the importance of flexibility and adaptability in carrying out the program. This problem was addressed by having one staff person travel to the community in advance of the team visit. Drawing on her experience as an emergency room nurse, she drew maps of the building the team would work in, drawing in traffic flow patterns with coloured arrows to work out the most efficient way of using the space, addressing issues of efficiency and guarding patients' privacy. As well, considerable practical ingenuity was required to create appropriate workspaces in the various buildings available in the communities. For example, the retinal photography has to take place in a completely dark room, so the team had to pack window-darkening material.

It was clear from the interviews that the program had generated a lot of pride among those who had worked to design and implement it. These people were proud of the enthusiastic reception they had found in the communities, and felt that they were making an important contribution to individual health not only in a part of Alberta which is comparatively underserved for health services, and in aboriginal communities where diabetes is a particularly important health issue. This commitment to the program had sustained the staff through a lot of long hours and reinforced their willingness to work through the challenges that had arisen during implementation.

Negotiating relationships was a major task in the implementation of the Mobile Diabetes Screening Initiative. As noted earlier, health service delivery in

Alberta is the responsibility of the Regional Health Authorities. This program, funded by the ministry and coming from an organization outside the RHA structure, was intended to support the work of the RHAs, but it also had the consequence of generating considerable additional work for the regions by dint of finding many additional people with diabetes for whose ongoing health care the regions will have to pay. "Finessing" the relationship with the regions so that they would support this new initiative was accordingly important. It was also crucial to establish and maintain good working relationships with the governing bodies in each Metis settlement, as one element of getting community support for the program. In part this was accomplished by finding people in each community, such as people serving on a community health council, to support and champion the program. Another part was making a point of incorporating community desires and concerns into how the MDSI was set up. For example, the program was originally intended to serve only people known to have diabetes, but was expanded to screen those at risk of diabetes as well, after community members expressed this as a priority.

One artefact created by a staff member had a particular impact in smoothing the way for the program in many different environments. The program coordinator put together a scrapbook of pictures taken during each community visit. The scrapbook was put together with great care and attention paid to attractive design. It was very effective not only at conveying how the MDSI "looked" to someone who had never been there, but it also conveyed a

sense of pride in the MDSI and also a sense that it was a warm and friendly program. Taking the time to put together a book like this, while also working under tight deadlines to implement the nitty-gritty of the MDSI, was an illustration of how aware this person was of the importance of making people comfortable with the program. The book had a life beyond explaining the program to people in the Metis communities; it was also effective at generating enthusiasm within regional health authorities. One copy was also sent up through the Alberta Health and Wellness hierarchy to inform those people about the program, rather than the usual dry briefing note.

Themes

It will be apparent from the above discussion that the managers involved with the implementation of the Alberta Diabetes Strategy had to work extremely hard, and with considerable commitment, in order to move the implementation process forward. Although the context of each program was unique, some consistent themes emerged:

a) The challenge of working in a very compressed timeframe. This timeframe was partly created by the importance of the fiscal year in government operations. The Alberta Diabetes Strategy was announced in May 2003, one month after the beginning of the fiscal year. There was considerable pressure on organizations to produce results within one fiscal year in order to justify funding levels, but the fact that they were starting one month late, coupled with the immense task of designing detailed, complex programs, meant that staff

members felt the pressure to work extremely hard to produce a lot of results in a short time.

b) Working in very complex environments. Each of the programs unfolded in the context of a relationship between the implementing agency and Alberta Health and Wellness, but there were numerous other relationships as well that had to be established and nurtured. Furthermore the complexity of these programs themselves was also a challenge, requiring staff to learn quickly and work out a lot of details.

c) The challenge of relationships with Regional Health Authorities (RHAs). This surfaced as an issue in many interviews. The Alberta Diabetes Strategy was structured in a way that cast RHAs as organizations who were affected by the results of the programs, for example by having additional people with diabetes to treat, and by the public expectations that were raised by the programs. Yet RHAs did not have direct responsibility for them, nor did they receive extra funding or support. RHA staff people consequently responded in a range of ways to the programs of the Alberta Diabetes Strategy, some feeling that the money for the strategy should have come to RHAs, others viewing any additional health promotion effort, from whatever the source, as a good thing.

d) The challenge of finding ways to support and encourage lasting behaviour change in the general population. The Alberta Diabetes Strategy will only succeed in preventing diabetes if its component programs succeed in persuading people to make lasting behaviour change. This is a huge task, as

many of the people I spoke to acknowledged. One person spoke of the fact that "there are a lot of hurting people out there whose pain gets in the way of being able to make changes". Another pointed out:

> I'm assuming you know about behavior change theory and I mean you have to keep at it and keep at it and keep at it. It's taken us thirty years to convince people to wear their seatbelts, and they still don't all do it, so six months to try to get them to change their eating and physical activities habits is a drop in the bucket.

e) The challenge posed by the low level of knowledge, and apathy, about diabetes in the general population. The impetus for the behaviour change discussed above will only come when people realize that diabetes is a serious disease. This awareness is not widespread in the general population, where misconceptions that diabetes is "a touch of sugar" in your blood, that you can't do anything about, are still widespread. As one person told me in some amazement:

> I don't think I can say that enough: that people don't know what diabetes is, they don't know the complications, they don't know that it can kill you, they don't know that being too fat can cause diabetes, etc., etc.

Another person summed up apathetic reactions he had encountered as, "they just become like, 'So diabetes is going to happen, it's going to happen to me and I'm going to die from it.'" Addressing ignorance and apathy, then, is a main task of the people who are implementing the Alberta Diabetes Strategy.

To meet these and other challenges, the managers I interviewed had to solve problems and make decisions based on their reading of what actions were likely to be successful the environments in which they worked. Being able to read environments this way, and act competently within them, requires "situated, pragmatic knowledge" (Dutton et al 2001: 733). Identifying the

knowledge inherent in what managers do will be outlined in more detail in the next chapter.

CHAPTER 5: THE EVERYDAY WORK OF IMPLEMENTING POLICY: MANAGERIAL PRACTICES

This chapter is an in-depth examination of the four practices enacted by the managers I interviewed. These practices were: *finding the right people, negotiating space for the programs, engaging the wider community* and *operating within differing temporal structures*. The four practices were enacted at all of the organizations involved in the implementation, but sometimes were enacted through different activities. I will go through each, outlining the activities comprising the practice, and the contextual knowledge constituted in the practice.

Context

The four practices were identified through interviews conducted between October 2003 and July 2004 with managers working at or with the three main organizations involved in the implementation of the Alberta Diabetes Strategy. The implementation process unfolded in a complex environment created by the fact that many organizations were involved. These organizations were bound together by mutual dependency – in other words, no single member of this network would have been able to implement any part of the strategy on its own (Klijn 1996, Kljjn and Koppenjan 2000). The management of implementation through a network "involves the sharing and coordination of 'management' between multiple parties" (O'Toole, Hanf & Hupe 1997). Because of this interconnectedness, cooperation and trust were important elements in moving

the implementation forward (Klijn 1996). Maintaining these elements was an important priority for the people to whom I spoke. Another important part of the context was the nature of the Alberta Diabetes Strategy itself. O'Toole, Hanf and Hupe (1997: 150), studying implementation in networks, have written of the need to attend to the development, maintenance and utilization of a common purpose "within and across functionally specific clusters of interrelated actors". In the implementation of the Alberta Diabetes Strategy, a large part of this common purpose was created by a commitment to the strategy itself, born out of actors' commitment to reducing the burden of diabetes in the general population.

The four practices that I saw being enacted in this context were associated with different forms of contextual knowledge, as follows:

Knowing constituted in the practice	Practice
Knowing the people	Finding the right people
Knowing the program space	Negotiating space for programs
Knowing the community	Engaging the wider community
	Operating within differing temporal structures

Practice #1 – Finding the right people

The text of the Alberta Diabetes Strategy outlines that grants of money will be provided to the Canadian Diabetes Association (CDA) and the University of Alberta in order to carry out certain programs. Each of these programs, however, are described in just a sentence or two. At CDA and the University of Alberta, as well as at Alberta Health and Wellness, certain key people were already in place as a result of involvement in the policy design process. However, for the work of moving from the brief program descriptions to actual,

delivered programs, many other people had to be recruited into key positions both within and outside the organization. Implementation required dedicated staff people, volunteers to serve on Advisory Committees, and contacts at other organizations such as Regional Health Authorities.

The importance of getting the "right person" into each of these positions was a recurring theme in my interviews. This often came up when I asked people what had been important in moving the implementation forward. The elements of being the right person were often described as personal talents, particular skill sets, commitment to the strategy, credibility and experience. As well, the ability and willingness to work long hours to meet very tight timelines was frequently cited. One person, commenting about a staff member at another organization, put it this way:

> I've enjoyed working with her, and my goodness how they found her and were able to keep her is quite astonishing, in terms of her commitment to the project and the hurdles and things that she has stayed with. And that is something one needs, is a sense of humour, too. To be able to carry on with some of this stuff sometimes.

Undergirding this practice was a form of contextual knowledgeability which I am calling "knowing the people". In the case of recruiting volunteers, or finding the right person at a RHA with whom to connect, the ability to enact this practice often came down to the experience of the person who was doing the looking. This was an aspect of managers' knowledgeability: knowing, for example, the history of similar initiatives in the past, and who had been involved in them. For example, one manager at Alberta Health and Wellness described

how she drew on this knowledge to know who should be informed about the Alberta Diabetes Strategy:

> I know it was partly on my advice that we connected up with some of the people in [city name], because I was aware through the initiatives that I had funded that they had already been developing different kinds of [diabetes program] models.

Developing this knowledge was identified by people new to their positions as a key priority for the ability to do their jobs well. One such person said:

> Working through who were the best people to work on certain things has probably been the biggest [thing I had to learn].

The importance of relationships was highlighted in at least one instance where program staff, not sure of whom they should be contacting at a regional health authority, wound up dealing with the "wrong" person – wrong at least from the perspective of another RHA staff member, who felt he should have been contacted instead. Situations like this represented "false starts", and had an intangible impact on the implementation process, certainly losing time, and potentially damaging valuable relationships or causing a loss of important credibility.

Practice	Activity comprising the practice	Data
Finding the right people	Finding the right staff people, volunteers and contact people	You have to have vision for this kind of project. You need to be able to see how things might be different four years from now or twenty years, and not everybody has that kind of vision. She was probably the best person that could have been brought on board simply because she had that vision of how the team would function, very strong integrity, work ethic - unbelievable, lots of energy to put into this whole project. I guess to hire the right people. I think that's also key.

Table 5.1 Practices and activities constituting *knowing the right people*

Practice #2 – Negotiating space for the programs

The implementation of the Alberta Diabetes Strategy programs required many actors across a wide range of organizations. From the perspective of the two agencies contracted for the design and delivery of programs, the Canadian Diabetes Association and the University of Alberta, the other organizations involved included not only Alberta Health and Wellness but also other provincial and federal ministries, regional health authorities, community agencies, other not-for-profits and various for-profit companies.

As discussed above, staff members needed to know, or know how to find, the relevant actors in these organizations. They also needed to know how to carry out a range of activities I am calling *negotiating space for the programs* – that is, making sure the programs could launch and be viable in a complex environment, where both the structure and content of the programs often represented departures from the norm.

One big part of this practice was managing internal and external expectations about what an organization could take on and deliver. This was particularly strong at the Canadian Diabetes Association as they worked to implement the Prevention Campaign. First of all, CDA staff members had to build a new relationship with the government funder about what the organization could do, because they had never had this sort of funding relationship before. One manager, reflecting on what had been important in the implementation process, cited "very close networking with some government

departments on what their expectations were of a non-profit organization." As well, the Prevention Campaign marked an internal organizational change for CDA, because it serves an entirely new target group – the population as a whole, rather than the group of those already diagnosed with diabetes that has been CDA's traditional audience. Finally, because the campaign was not carried out by regional health authorities, it represented a departure from how health services in Alberta are usually, and some felt should continue to be, delivered. In order to achieve necessary support both within and outside CDA, the range of reactions caused by the new structures had to be addressed.

The complexity of the implementation environment had other dimensions as well. For all of the programs a host of practical requirements, such as meeting privacy legislation, dealing with corporations subcontracted to provide goods and services, or budgeting, had to be successfully carried out. Additionally, as discussed previously, the tight timelines of the implementation process put a lot of pressure on staff and other people involved. Finally, many of the staff at all three organizations had important work responsibilities outside of the scope of the Alberta Diabetes Strategy that required attention and delicate balance.

In this work, staff at Alberta Health and Wellness acted to facilitate relationships between the contracted agencies, other organizations, and communities affected by the programs, in order to help create space for the programs. Referring to this, one Alberta Health and Wellness manager said:

> I think it is an ongoing responsibility being able to work with the regions and the communities, and facilitate them working together, and being able to address what

issues do get raised periodically. And there's still lots to do with the communities we've already been in.

People at both the Canadian Diabetes Association and the University of Alberta emphasized the importance of the work carried out by Alberta Health and Wellness managers in this regard. Some cited the work of ministry managers in nurturing relationships with Regional Health Authorities; others pointed to the importance of particular managers' knowledge about particular individuals in other organizations who should be involved in implementation.

Staff at Alberta Health and Wellness also used informal processes to aid them in implementation work. In particular, knowledge gained through relationships was useful to them in assessing the progress of particular programs, or how programs were perceived in other organizations, or the likelihood of funding being continued for particular programs. Consequently, open and trusting communication was frequently identified in my interviews as a key factor in implementation.

Finally, Alberta Health and Wellness built space for the components of the strategy by working to build credibility for individual programs, and the strategy as a whole, within government itself. This took the form of reporting up through the hierarchy about what had gone well; one example of this is sending a copy of the Mobile Diabetes Screening Initiative scrapbook up through the hierarchy in lieu of a traditional briefing note. It also took the form of structuring "small wins" for individual programs.

For staff at the Canadian Diabetes Association and the University of Alberta, the practice of negotiating space for their programs was enacted differently. These staff did not see themselves as facilitators, but as being in the centre of a cluster of relationships, with communities, volunteers, regional health authorities, other staff within their organizations and Alberta Health and Wellness. Managing issues that arose among those groups came up often when the people I interviewed discussed the challenges of implementation.

An example of the complex environment in which space had to be found is the expansion of the Alberta Monitoring for Health program, the funding mechanism for costs of diabetes supplies. The CDA has been administering this program, using funding from the Alberta Aids to Daily Living program, since 1991. With the increased funding under the Alberta Diabetes Strategy, however, numerous changes arose. First was the issue of means testing. The decision to establish an income cutoff was made by Alberta Health and Wellness, in order to target available funding to those most in need of it (Ruttan 2003). CDA opposes means testing, believing that funding should be available to all; the organization had been lobbying Alberta Health and Wellness for years to increase AMFH funding to $40 million a year to cover all people with diabetes. However, CDA staff recognized that they had to work within the constraints of means testing since that was the only way the $8 million annual increase would come about – it was a pragmatic compromise, yet one with ongoing tension. CDA maintained its commitment to the principle that funding should be available to all, knowing

that this could potentially bring it into conflict with government since if, for example, a person with diabetes ever challenged government about funding, CDA would be bound to support that person.

The organization's opposition to means testing added some wrinkles to designing the business processes for the new system. In general, CDA is the public face of the AMFH program: the AMFH offices are located in CDA's Edmonton office, for example. However, CDA refused to be the agent approving or disallowing new applicants, since eligibility was based on a criterion the organization's philosophy rejected. Therefore, new applications were received at CDA offices and entered into a database there. Then, the information was securely transmitted to Alberta Health and Wellness offices so that staff there could match applicants' information with the those who met the predetermined income criteria (eligibility for subsidy of health care premiums). Then the information was transmitted securely back to CDA so that the organization could inform applicants whether or not they had been successful. The CDA could probably have applied to have the eligibility information transmitted directly to them, which would have been easier from a technical and privacy legislation perspective, but they wanted the onus of acceptance or rejection to fall on Alberta Health and Wellness.

The issue of means testing created two communities affected by the program: one, the group of those who had been accepted onto the program under the old rules, but who were not necessarily eligible under the new criteria.

These were "grandfathered" in for two years, with their status after that point being uncertain. The other community was those applying to the new program who were not eligible. CDA was uncomfortably aware that the income restrictions meant a large group of low-income people were not eligible for coverage, since they made slightly too much to be eligible, yet still were quite needy of money, especially considering that the costs of buying diabetes supplies for a child with Type 1 diabetes can be about $6,000 a year. CDA was uncomfortable first of all with not being able to help people whom they knew could really benefit from funding. Managers were also aware that in order to justify the increased funding, after lobbying for years for an increase, they needed to have the program fully subscribed (that is, have the most possible number of people registered), yet this would be difficult to achieve given the restrictive criteria. So, the issue of means testing had implications for both people with diabetes and for relations with government funders.

Another issue adding to the complexity was the requirement of meeting the provincial Health Information Act and the federal privacy legislation, the Personal Information Protection and Electronic Documents Act (PIPEDA). The CDA had to meet this legislation because of instituting a Quikcard system whereby successful applicants would receive a plastic card with a stripe, similar to a debit or credit card, that could be swiped at the pharmacy so that payment would be automatically transmitted to the pharmacist without requiring the person with diabetes to pay upfront and then wait to be reimbursed. This was

much more convenient for both the patient and pharmacist, and also streamlined processes at CDA (previously they had had to process receipts and send out reimbursement cheques). Yet the risk management assessment that the organization had to go through, requiring them to meet very stringent data protection standards, was a huge process, slowing down implementation of the new AMFH program by a couple of months. In going through this, CDA not only had to negotiate with Quikcard and Deloitte and Touche, the external auditors verifying compliance, but also with the organization's National Office in Toronto. CDA's Alberta staff members were responsible for the implementation of AMFH and the other components, but they also had to account for their time and budgets to the organization's top managers in Toronto. These people didn't necessarily understand the complexity of the legislation and what had to be put in place to meet it. One manager explained it this way:

> When we were trying to negotiate with National Office why something had to be written exactly as it had to be written, and why we had to rent a special file storage area, and we had to do this and we had to do this, they couldn't understand it, because they weren't living the Health Information Act in Alberta.

Here we see government, for-profit corporations and people within the organization emerging as additional groups whose perspectives and interests had to be managed in order for implementation to happen. As a further aspect of the complexity, it should be remembered that many of the CDA staff working on the expansion of the AMFH program were also working to implement the Prevention Campaign and the Clinical Practice Guidelines project, along with a host of other tasks unrelated to the strategy.

Practice	Activity comprising the practice	Data
Negotiating space for the programs	Facilitate relationships	Alberta Health was helpful in negotiating relationships [between my organization and various Regional Health Authorities]. Alberta Health and Wellness, [name], was wonderful; she just helped me connect with some of those individuals: "OK, here is who you can contact to see if they are interested."
	Using informal processes, particularly to gain information about programs	We do have some really good collegial relationships with people who are working in the regions on diabetes and, we do come to know some of that, not formalized but less formalized. No commitment of any dollars beyond that [date] but with a through-the-system, I don't know what you want to call it, "general understanding" that will maintain a commitment to this for the foreseeable future, whatever that is. I think there's a sense within the ministry [that it will continue], but you don't want to have to hang your hat on this sort of stuff.
	Working to build credibility within government itself	Success builds on success and ultimately, you hope for a change. You have to get practical about the accomplishments you want, and aim for small victories. You build a track record of success, then build on that. There's no substitute for that in government.

Table 5.2 Practices and activities at Alberta Health and Wellness constituting *knowing the program space*

Practice	Activity comprising the practice	Data
Negotiating space for the programs	Managing internal and external expectations about what the organization could do	Most people look at non-profits as the poor cousins, lower quality work – get what you pay for, that kind of that attitude and I think what these projects did is showed other non-profits, showed government, showed other parts of CDA, that, if you have the target and you work towards the target and you have the right people doing it that, as an organization, you can compete against any other business out there.

	Managing issues that arose the cluster of relationships with other organizations	The one thing we have been very very cautious with … is not to be too overbearing and run up into the regions and say, OK now, we want you guys to help us roll this out, because they don't actually have any more resources. And I'm glad I was aware of that. So we are very sensitive to saying, "How can you help us champion, and we will give you all the tools to do that", or "How can you connect us with the right people". So we have been very sensitive to that as well. We had very good relationships with the corporate end. Because of course once we were asked to do a privacy impact assessment it took several months to do that but the program had started already on some levels right, with our commitment with the corporate entities that we were dealing with. So they were operating for several months on letters of agreement, no contract, but you know they were very giving to us that way.

Table 5.3 Practices and activities at the contracted agencies (the Canadian Diabetes Association and the University of Alberta) constituting *knowing the program space*

Practices #3 and #4 – Engaging the wider community and operating within differing temporal structures

The practices of *finding the right people* and *negotiating space for programs* required knowledge of the immediate context in which the strategy was being implemented. However, there was a much wider sphere in which the programs were unfolding, and in which the impact would most lastingly be felt. This sphere was a broad public and temporal context. This context was often invoked in interviews when people were reflecting on what they expected to be the ultimate results, or success, of the strategy. People were aware that ultimately, diabetes prevalence will only decrease if members of the general public make lasting and sustained behaviour change. Yet there are many factors mitigating against such behaviour change: competition from other options, such as

television and junk food, the perceived unappealingness of healthy living, the difficulty of making healthy choices on a long-term basis. And, even if this behaviour change does happen on a widespread and lasting basis, the results, as measured in changes in diabetes prevalence, will not be seen until much time, maybe twenty or thirty years, has elapsed. The two final practices I have identified: *engaging the wider community* and *operating within differing temporal structures*, are both constituted by a knowledgeability about what I am calling the "community context". In both of these practices, there is a balance between the imperatives of the strategy itself, such as getting a certain number of prevention campaign kits in the mail, and between the long-term results. In the practice of *engaging the wider community*, the balance is between what managers know needs to happen, and what they feel is reasonable to actually expect. In the *operating within differing temporal structures* practice, the balance is between the deadlines of the strategy itself, and the long-term timeframes of results.

Fundamentally, the practice of *engaging the wider community* is rooted in the recognition that, as things currently stand, our culture does not support healthy living. One manager talked about the example of China, where it is common for everyone in a community to come out in the morning to do exercises together, as being the sort of culture we need to have to support people in the habit of regular exercise, one important component of healthy living that will help to prevent diabetes. In Canada, on the other hand, because food of all kinds, especially junk food, is so plentifully available, and because our

communities are set up to be so dependent on cars, it is very easy to be inactive and to overeat. One manager at the Mobile Diabetes Screening Initiative told me that, in each community, she visits the local food stores to see what is available. Always, chips and pop are more readily available, and cheaper, than healthy choices such as fruit.

In the face of this, one activity constituting the practice of *engaging the wider community* is recognizing that unhealthy choices are popular, widely available, and supported with well-financed marketing campaigns. In the face of this, and with limited resources, the managers at both CDA and the University of Alberta chose to rely on the power of interpersonal connections to support change when designing their programs. For example, the Prevention Campaign's advertisements targeted women 25-54, relying on these women's position as caregivers to many others. In the education component of the Prevention Campaign, staff will be seeking out community leaders, such as Girl Guide troop leaders, and engaging them in a education session about diabetes, in return for a promise from each of these people to then organize two sessions to which they will invite friends and family to tell them about diabetes and how to prevent it. Thus the information is coming from a person who is already a member of individuals' personal sphere, rather than a professional. In the Mobile Diabetes Screening Initiative, the program will follow up with individuals at each return visit to the community, monitoring their health and how this changes as a result of choices the person makes. As well, though, the

MDSI staff are hoping that the visits from the team will mobilize community-level support for healthy living, something they recognize is essential – the team visits alone cannot do it all.

Another activity constituting this practice is the recognition that healthy living messages have an importance beyond diabetes. The core elements, such as eating more fruits and vegetables, exercising more, reducing stress, etc., are important in preventing other diseases such as heart disease or cancer. Consequently, many managers at all three organizations saw one of the important results of the strategy as being the building of community capacity for tackling chronic disease in general. By working together on diabetes, individuals and organizations build experience and relationships that will help in future campaigns targeting more chronic diseases. A few expressed the opinion that starting with diabetes was also a good idea from the point of view of educating the public – it is easier to get people's attention talking about one specific disease, than about the vague concept of chronic disease in general. One manager described it this way:

> You start putting people at a table talking about a common issue from multiple perspectives and you start building up relationships and you start getting an increase in sidebar conversations and you get an increase in collaboration outside the strategy and you can't quantify that in any meaningful way because it's invaluable.

Finally, many of the people to whom I spoke expressed the opinion that the strategy was important because it represented a responsible response from government to a public health problem. This was the activity of valuing the

strategy in and of itself. One manager at Alberta Health and Wellness described the strategy in these terms:

> It's the right thing to do with the numbers of people with diabetes and it impacts the health care system. It's partly a fiscal responsibility but it's not all about that. It's also, do Albertans live better because they can manage their life better.

Speaking from the perspective of one of the contracted agencies, another manager discussed the importance of the strategy by saying, in part, "I think the Alberta government actually acknowledging and putting a strategy on the table showed a significant commitment to dealing with the problems."

The final practice I am identifying is *operating within different temporal structures*. This is following Orlikowski and Yates (2002: 685), who write that "temporal structures are created and used by people to give rhythm and form to their everyday work practices". They add (2002: 687) that "by enacting multiple and often interdependent temporal structures, actors engage with alternative, interacting or contradictory expectations about how to temporally structure their activities". I found two interacting and often contradictory temporal structures that were enacted in the practices of the managers working on the implementation of programs; this practice was common across all organizations.

The first temporal structure I have called "policy time". It is the temporal structure associated with the immediate, short-term work of implementing this strategy. The sense of this time as expressed in interviews is that it is characterized by looming deadlines and tight timeframes, navigated by intense work, commitment and pressure. Much hinges on meeting the demands of this time, particularly funding renewal. The outcomes associated with this time

frame are evaluation and research results, or the numbers of people registered in, or treated by, programs.

One person illustrated the nature of this time frame in this way:

> The time plans were so unrealistic in hindsight. [Difficulty arose from] how the project was conceived, and that they [thought they] could get everything done. You know, to think that the amount of work that I've done and I have worked and worked and worked and worked and worked. Like really, really I have worked, and I have quite a high capacity for work and for being able to produce and I have never worked as hard as that in my whole life as I have on this project. We're six months late due to how the project was conceived.

Yet at the same time, there was another temporal structure arising out of the managers' practices, one that rather contradicted the first. This time frame was very long-term: people talked about twenty or thirty years, or a generation from now, sensing that it is not precisely quantifiable. Here human factors, such as the difficulty of making lasting behaviour changes, predominate. The outcomes associated with this time frame are community-building, greater public awareness about diabetes and better population health measures.

One person put it this way:

> Nothing happens overnight. If you see the outcome in ten years, probably you're lucky. You're planting seeds. You're out there trying to build awareness and that is the seed planting and you're trying to work with the community, you try and work with stakeholder groups, you try to work collaboratively with government to keep watering those seeds and bringing them forward.

But it was more common to put the time frame further into the future, as expressed by another person: "It's going to take us an entire generation to sort them out. You'll have to be thinking of generations."

The lack of congruity between the two time frames was expressed this way:

> Part of what you're fighting against is the three-year business cycle and mentality [in government]. All of their decision-making is focused on three-year outcomes, and what works is this kind of a program, and in a lot of the population health disease prevention stuff we talk in generational change.

Practice	Activity comprising the practice	Data
Engaging the wider community	Designing programs to draw on the power of interpersonal connections to support change	There's also the help that if you're a day home provider for example, and you see Mary and Fred and they come every day to pick up little Johnny, and you think, "Gee you know they're really at risk for Type 2 diabetes," but you have a relationship and that you can perhaps address that in a way that I never could, because I'm "from away," and all that kind of stuff. It's meant to be a kind of a longer term and more positive way of doing things.
	Valuing community capacity as an outcome of the strategy work	I foresee with the resources that we're helping to build some community capacity to deal with this and other health issues. Sure, it's diabetes, but I mean what we put in place to deal with diabetes can be used for other things.
	Valuing the strategy in and of itself	I think that's probably the key importance of documents like this, it's public recognition by government and other stakeholders like RHAs that this is a key health issue, we have to work together and we have to address it, so that's one really key thing over the ten years [of the strategy], is people, organizations, champions are stepping up to the plate.
Operating within differing temporal structures	Enacting the "policy time" structure	So what could happen is – and this is why we want to make sure that the money is spent – we know the first year we won't [spend it all], because we've only had really six months into the program to spend the money, but in year two we absolutely need to be spending all that money because what could happen is government could say, well, you don't really need it so we're going to reduce your funding. My kids suffered, my family suffered, but it was worth it, it seems, to get the multi-year contract in place.
	Enacting the "life time" structure	What I would see as the outcome is that yeah, we train people but the message of diabetes continues to be given in communities long after the project's over. I keep seeing the potential. I don't see the end.

Table 5.4 Practices and activities constituting *knowing the community*

Knowing constituted in each practice

In a 2001 article, Dutton et al analyzed "issue-selling" moves made by middle managers in organizations. They concluded that these issue selling moves are related to particular types of contextual knowledge. I also found this in my work. The first type of contextual knowledge is "knowing the people", underlying the practice of *finding the right people*. This is very close to Dutton et al's category of "relational knowledge", which is defined as "understanding of the individuals and the social relationships that were important" to managers' issues. The second category of knowledge that I found was "knowing the program space." This is related to knowing the implementation norms created by an intersection of legislation, organizational norms (including organizational philosophy), the timeframe of the strategy and the nature of relationships with government, other organizations, community groups and other staff members within one's own organization. This form of knowing underlies the practice of *negotiating space for programs*. Finally, the practices of *engaging the wider community* and *operating within differing temporal structures* are rooted in knowledge of the community, including the difficult nature of behaviour change and the broad timeframe in which real results will be felt.

Type of Knowledge	Questions
Knowing the people	Who has experience with similar initiatives? Who has credibility in the communities or organizations? What skills do the people we are looking for have to have? What authority do the people we are looking for have to have? How do we find these people?

Knowing the program space	What other organizations does this program potentially affect? How do we present our programs to other organizations (e.g. regional health authorities)? How do we meet the practical requirements such as budgeting and adhering to privacy legislation? What changes to the status quo will come out of the structure of this program? Who will be affected by these changes? What else is our organization doing right now? Does our organization have to make any compromises in order for this program to go ahead?
Knowing the community	What is the long-term impact of the strategy? When will we see results? What will these be (how will we know them when we see them)? What is the broader environment in which the strategy is unfolding? What are the competing messages? Does the broader culture support our message?

Table 5.5 Types of knowledge related to the practices being enacted

Organizational culture

Although organizational culture was not something I explicitly set about to examine in my research, it emerged as a key component of studying practices. Organizational culture is "the set of values, guiding beliefs, understandings and ways of thinking that is shared by members of an organization and is taught to new members as correct. It represents the unwritten, feeling part of the organization" (Daft 1995: 333). As De Long and Fahey (2000: 116) argue, culture and knowledge use in organizations are linked; "any discussion of knowledge in organizational settings without explicit reference to its cultural context is likely to be misleading". The practices that emerged in my study were all predicated on the importance of relationships, whether personal, organizational or at a community level. These practices were supported by contextual knowledge that was also fundamentally relational. These findings suggest that the culture in

each organization supports interactivity, collaboration and reliance on collective knowledge (De Long and Fahey 2000: 121). The role of culture in practices needs to be more extensively examined in future work.

The "shadow side" of practices

In this section, I have detailed the practices that emerged from interviews with managers about what they needed to know and do in order to implement policy. This analysis is based on the assumption that these are successful and effective practices, an assumption which is supported by the fact that, on the whole, the implementation is proceeding and results, in the forms of programs, are emerging. Yet it should not be overlooked that each of these practices has a "shadow side" – a negative consequence that comes out of being enacted. The shadow side of finding the right people, for example, is that often the same people get called on over and over again, not just for the Alberta Diabetes Strategy (although it was not unheard of to see the same person working on more than one program), but also for other strategies. People with commitment and experience are recognized as valuable, and often want to be involved, but the resulting demands on their time mean that they can quickly burn out. The dilemma is expressed well by one person, who, while acknowledging the benefits of "being at the table" as strategies roll out, commented:

> I know in speaking to colleagues in other similar organizations involved in these various projects [that] we are really struggling, because this becomes very demanding on our time, and the timelines are usually crushing. So it's been a bit of an issue and it will increasingly be [an issue], as groups become more vocal. You know, we want to participate, we want to be involved at the table as part of these coalitions, but it is becoming increasingly difficult to manage.

The shadow side of *negotiating space for new programs* is that it is terrifically complex work, requiring a lot of skill and commitment. This places high demands on staff. References to being tired were abundant in my interviews, and it is telling that the program coordinator for the Mobile Diabetes Screening Initiative accumulated enough overtime in the first few months of the program to be able to take the entire summer off. It seems likely that the demands placed on staff could, in the long term, contribute to burnout and staff turnover.

The shadow side of the two practices that require navigating a long-term, complex environment, *engaging the wider community* and *operating within two temporal structures*, is related to the high degree of ambiguity that this sphere entails. How do you measure if the work has made a difference?

Conclusion

Here I have studied the practices of managers, paying particular attention to the contextual knowledgeability contained in the practices, the range of activities comprising the practice and the "shadow side" of each practice. The complexity of the implementation highlights the complexity of the contextual knowledge managers must possess in order to discharge their tasks adequately.

CHAPTER 6: CONCLUSIONS

The study described on this thesis was based on the core belief that successful implementation of health policy plays an important role in ensuring that research evidence can benefit public health. Recent research studies have suggested that we can reduce the incidence of new cases of Type 2 diabetes by encouraging the public to make healthy lifestyle choices. The programs of the Alberta Diabetes Strategy are designed around this message, using a variety of innovative ideas to encourage and support healthy behaviour.

My study picked up on the call by Schofield (2004) calling for more study of managerial competence in the policy implementation process through a focus on micro-level behaviour factors. Previous work on implementation has identified policy failure as a discrepancy between policy design and policy outcomes. The analysis in my study identifies the complex nature of the daily work that must be done by managers in order to move from design to outcomes, and the key role of contextual, relational knowledge in this process. It was clear that part of being the "right person" for working on the implementation was an understanding of organizational culture. Consequently, future scholarly work to more fully delineate the role of organizational culture in networked policy implementation processes would make a valuable contribution.

My study of these programs has led to the following claims.

First, the managers I studied enacted the four practices of *finding the right people, negotiating space for the programs, engaging the wider community* and

operating within differing temporal structures. These four practices enabled managers to operate within a highly-complex, nuanced and changeable environment which both shapes and is shaped by actions taken by those connected with the process.

Second, the importance of the first practice, *finding the right person*, must be stressed. In the work of implementation, staff faced challenges such as working within complex environments, meeting logistical and legal requirements, negotiating relationships and developing effective programs. Furthermore, they had to do all of this within very compressed timelines. It was crucial to have staff members in place who were able to meet these challenges. The managers I interviewed had to solve problems and make decisions based on their readings of what actions were likely to be successful in the environments in which they worked. This type of competent action requires skill, experience and contextual knowledge, including knowledge of the organizational culture.

The importance of this contextual knowledge was the third key point in my study. I have classified this into the categories of *knowing the people*, *knowing the program space* and *knowing the community*. These categories span a very wide range, from knowing one's own organization to knowing the much broader social and temporal context in which the implementation is unfolding. Work experience and predisposition are key factors in developing such knowledge.

My fourth point concerns knowledge transfer. As highlighted above, this study was based on the belief that effective policy implementation is a crucial

part of the knowledge transfer process. The question then becomes whether this belief was borne out by the study. The implementation of the Alberta Diabetes Strategy involved the design and delivery of programs that were directly aimed at supporting healthy behaviour, both through financial support and education. These programs were based on what we know about preventing Type 2 diabetes, based on current research evidence. Consequently, I believe that in this case the implementation process was an effective means of moving research knowledge about diabetes into the realm of the general public. Members of the public will, through participating in these programs, have some support for evidence-based behaviour change, should they wish it.

Based on my work, I offer the following "take-home messages" for decision-makers in various administrative capacities.

For senior managers at all organizations, I suggest the importance of supporting mid-level managers, in the following ways:

- Hire people with the ability to build relationships, both personal and organizational.
- Hire people who have both a short-term and a long-term focus (the ability to see both daily details and the broader vision).
- Allow these people to develop, by gaining experience and building relationships.
- Honour the knowledge developed by staff in their work.

For senior managers at organizations contemplating participation in a networked implementation process, I suggest the following:

- Be aware that issues of accountability, coordination, communication and learning will arise, more than once, and be prepared to deal with these.
- Remember the importance of finding the right people
- Consider the key role of organizational culture.
- Consider whether the resources of time, money, human energy and commitment are in place to deal with a new project.
- Work with mid-level managers and others to identify what other organizations will have to be brought in, formally or informally, to make the implementation work.

For senior managers at Alberta Health and Wellness, I suggest the following points:

- Mid-level managers at Alberta Health and Wellness have an important role to play in networked policy implementation, in particular through facilitating relationships. This work should be supported.
- Senior managers at Alberta Health and Wellness also have an important role to play, in particular by championing programs through the ministerial hierarchy.

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